

REMARKS

Claims 1 and 4-15 are all the claims pending in the application.

I. Response to Rejection Under 35 U.S.C. § 103

Claims 1 and 4-15 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Toru et al (JP 2002-49156) ("JP '156") as evidenced by its machine assisted translation, in view of Aoai et al (U.S. Patent 5,837,420), optionally further in view of Flanagan et al (J. Vac. Sci. Technol.).

The Advisory Action dated June 27, 2006 indicates that Applicants' arguments filed June 6, 2006 overcome the optional rejection based on Flanagan et al.

Further, in the Advisory Action, with respect to the Declaration data, it is asserted that LER is part of the issue of pattern profile improvement, and thus improved LER in the present invention is not unexpected, because Aoai et al teaches improvement of profile.

Applicants respectfully traverse the rejection based on JP '156 in view of Aoai et al for the reasons set forth in the Response filed June 6, 2006 and the following additional reasons in response to the Examiner's statements contained in the Advisory Action.

Aoai et al describes that "the smaller the dispersion degree of a resin is, the better heat resistance and image forming characteristics (pattern profile, defocus latitude, etc.) the resin can provide" (col. 38, line 66-col. 9, line 2). In the examples of Aoai et al, pattern profile was evaluated only in terms of the shape of each pattern (col. 82, lines 42-46).

Applicants respectfully submit that “pattern profile” as described in Aoai et al, and “LER” and “line width stability in vacuo” in the present invention are completely different characteristics from each other. Specifically, “pattern profile” evaluates (i.e., assesses) the shape of the cross section of each pattern. In contrast, “LER” and “line width stability in vacuo” are indexes for evaluating (i.e., assessing) the width fluctuation along the longitudinal direction of each pattern. Applicants have advised that it is common technical knowledge in the photoresist art that “pattern profile,” on one hand, and “LER” and “line width stability in vacuo,” on the other, are completely different characteristics, and further, it is not unusual that there is a case that even though “pattern profile” is good, “LER” and “line width stability in vacuo” are not good. Applicants thus submit that the superior results in terms of LER and line width stability in vacuo obtained with the positive resist composition of the present invention would have been unexpected to a person of ordinary skill in the art, even assuming that that person may have expected some improvement in pattern profile based on the teachings of Aoai et al.

In view of the foregoing, Applicants respectfully submit that the present claims are not obvious over the cited references and thus the rejection should be withdrawn.

II. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

RESPONSE UNDER 37 C.F.R. 1.114(c)
U.S. Application No. 10/812,092

Attorney Docket Q80752

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Fang Liu
Registration No. 51,283

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

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